



# Methods for Mastering the Mosquito



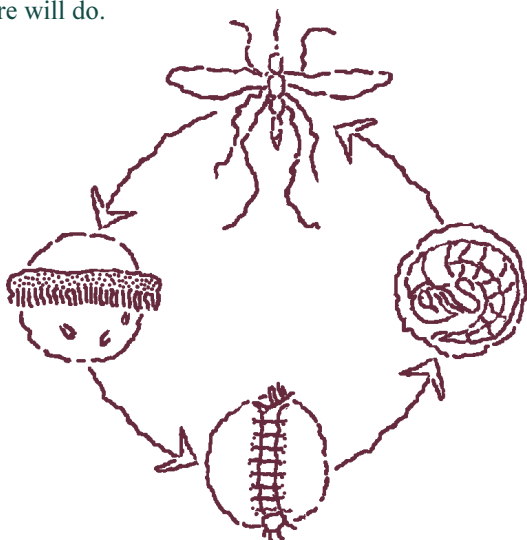
*Facts about mosquitoes and your health including:*

- Where they come from and why they bite
- Disease carrying mosquitoes in the U.S.
- How to avoid being bitten
- Home and community mosquito prevention

# Amazing Mosquito Facts

“*Mosquito*” is the Spanish word for “*little fly.*” There are 3,000 different kinds of mosquitoes and a worldwide population of 100 trillion! Even though most are tropical, there are mosquitoes in the arctic regions, in deserts, and probably near your home. They can fly up to 10 mph, dart between raindrops, or even fly backwards. Most live and die close to where they hatch, but some are strong flyers that travel many miles in search of a victim.

Only female mosquitoes “*bite.*” They require a “blood meal” in order to develop eggs to make more mosquitoes. Most female mosquitoes lay their eggs on standing water. Stagnant ponds, ditches, and fresh or saltwater wetlands are favorites. But even a few tablespoonfuls of water in a flower pot or old auto tire will do.



There are three stages of a mosquito after the eggs hatch: larvae, pupae, and finally, flying adults. Mosquito larvae are an important source of food for certain fish and the flying adults are eaten by birds, bats, and other animals. To humans and domestic animals, however, mosquitoes are strictly a nuisance and a health hazard, transmitting a variety of diseases.

# Why a Mosquito Should Be Stopped from Biting

In their quest for blood, mosquitoes may bite birds, frogs, snakes, and mammals, including people. Some, called “*peridomestic*” mosquitoes, actually live and breed around homes just to be near us. 24 hours or so after hatching a female mosquito flies off in search of a meal. She homes in on body warmth, odor, moisture, and the carbon dioxide that we exhale.

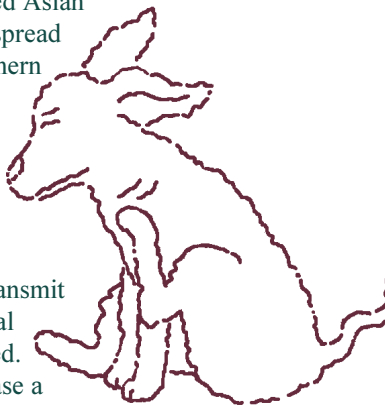
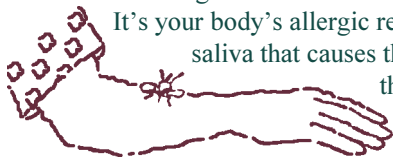
When she bites, she injects a bit of saliva that slows coagulation so blood flows freely.

It’s your body’s allergic reaction to the saliva that causes the welt and the itch later on.

In tropical countries, mosquitoes may transmit malaria, dengue fever, yellow fever, or filariasis, among other diseases. In the U.S., equine encephalitis is the most common one affecting humans. It’s untreatable, and can be fatal. Outbreaks frequently follow a surge in the mosquito population brought on by warm, wet weather.

The recently-arrived Asian Tiger mosquito, now spread over much of the southern U.S., is an aggressive, persistent biter that carries encephalitis. It’s commonly found breeding in discarded auto tires.

Mosquitoes also transmit canine heartworm, fatal to dogs once contracted. Pet owners can purchase a preventive medicine from a veterinarian.



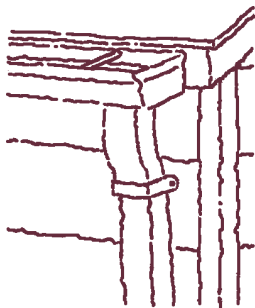
# Stopping Mosquitoes

Generally, the trend in the U.S. is away from spraying adult mosquitoes with chemicals. Wherever possible, government health authorities control large tracts of mosquito breeding land by “larviciding.” They use low toxicity biopesticides, like *Bacillus thuringiensis israelensis* (*Bti*) a live bacteria that’s deadly to mosquito larvae and harmless to other living things.

But, the mosquito that bit you last night may have hatched in the birdbath right in your own backyard!

Look for places where rainwater collects and stands. Fill all holes and depressions. Drain flower pots, children’s wading pools and toys. Flush bird-baths and fountains weekly. Clean clogged gutters and drains and cover cesspools. Remove debris like cans, bottles, and old car tires.

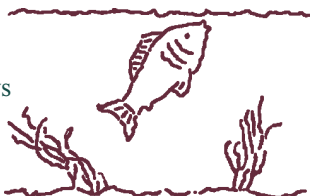
When you can’t flush or drain these items, or in stagnant ponds, low-lying wet areas, tree holes, unused swimming pools, and rain barrels, use a Bti product like Mosquito Dunks, floating tablets which release Bti slowly . . . an environmentally sensible way to control mosquito breeding naturally without endangering people, pets, or wildlife.



# Earth-Friendly Mosquito Mastering Methods

At home or with your school or community group, you can effectively reduce mosquito problems using common sense and environmentally—conscious methods like these:

- **Stock a pond with fish:** Goldfish and freshwater minnows (*Gambusia affinis*) will both eat



mosquito larvae. Check with your mosquito control agent about availability and local regulations.

- **Organize a neighborhood cleanup:** A great community project that eliminates lots of potential mosquito breeding spots and improve the view!



Concentrate on waterholding debris like old car tires and containers.

- **Use lot-toxicity insecticides:** Avoid highly-poisonous sprays indoors and out. Natural pyrethrin sprays (*made from chrysanthemums*) are helpful for clearing rooms. New control agents containing natural Neem oil are becoming available.